

GEOGRAPHIC INFORMATION SYSTEM ANALYST I
GEOGRAPHIC INFORMATION SYSTEM ANALYST II

DEFINITION

To perform professional level work in Geographic Information Systems (GIS) management and analysis; to create maps and reports by manual and automated means; and to create and maintain specialized GIS databases related to assigned areas of responsibility.

DISTINGUISHING CHARACTERISTICS

Geographic Information System Analyst I – This is the entry level class in the Geographic Information System Analyst series. This class is distinguished from the journey level by the performance of the more routine tasks and duties assigned to positions within this series. Employees at this level are not expected to perform with the same independence of direction and judgment on matters allocated to the journey level. Since this class is typically used as a training class, employees may have only limited or no directly related work experience. Employees work under general supervision while learning job tasks.

Geographic Information System Analyst II – This is the journey level class within the Geographic Information System Analyst series and is distinguished from the I level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

SUPERVISION RECEIVED AND EXERCISED

Geographic Information System Analyst I

Receives general supervision from assigned supervisory or management personnel.

Geographic Information System Analyst II

Receives direction from assigned supervisory or management personnel.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Analyze a variety of GIS data and prepare associated reports for use by assigned department; analyze, review, and ensure accuracy of mapping and related data prepared by lower level personnel or consultants for inclusion in various reports.

Design and/or modify GIS programming as necessary to accommodate the needs of a variety of users; verify accuracy of digitized data to ensure accuracy and quality of automated information.

Develop and design databases related to GIS database mapping functions and mapping layers.

Coordinate with Information Technology personnel to ensure network connections to City-wide GIS server; make related recommendations.

Coordinate GIS functions and uses with other departments, other agencies/jurisdictions, engineers, developers, and the general public; provide support to departments, agencies, and the public regarding GIS and identify and resolve related concerns.

Develop and document procedures for use of GIS functionalities; prepare related protocols; provide related training to a variety of GIS users.

Participate in emergency preparedness planning and implementation activities to facilitate the work of City departments, other public and social service agencies; provide information and training regarding GIS functions related to emergency situations.

Monitor GIS database performance against established standards; detect and troubleshoot problems.

Update a variety of maps, including utility, zoning, reference, topographic, political boundary, parcel and address maps.

Read and interpret civil plans and specifications for extraction of data to GIS Utility system and data layers; use GIS to analyze data for engineering/planning purposes.

Prepare Improvement Plans for the repair, rehabilitation, or construction of Public Improvement.

Prepare maps, line drawings, color graphics, charts, graphs, architectural renderings and other documents or materials for use in brochures, reports and presentations to the City Council, boards and commissions, and other public agencies.

Prepare, code, and digitize maps and geographic feature data into the GIS database following established procedures and sequences to update layers within the system.

Participate, as assigned, in City committees and groups to provide input to GIS planning and implementation strategies and work plans; provide technical assistance as needed.

Work with City departments and other agencies in developing, implementing, and maintaining a City-wide address database program.

Utilize Global Position System (GPS) equipment to acquire and record GIS positional and attribute data.

Assist in development of policies and procedures; oversee implementation and enforcement of policies and procedures.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Perform related duties as assigned.

MINIMUM QUALIFICATIONS

Geographic Information System Analyst I

Knowledge of:

Principles and practices of Geographic Information Systems (GIS) and computer operating systems.

Algebra, geometry and trigonometry, especially as related to computation of distances, angles and areas.

Computer aided drafting and mapping tools and programs, including AutoCAD software, ESRI-based GIS software (for example, ARC/INFO, ArcView) and related applications.

Records storage and handling techniques.

Customer service principles.

Ability to:

Perform professional level work in GIS database and system management and analysis.

On a continuous basis, know and understand all aspects of the job. Intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures.

On a continuous basis, sit at desk for long periods of time. Intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone,

and write or use a keyboard to communicate through written means; and lift or carry weight of 10 pounds or less.

Design and develop sequential processing of tasks and perform spatial analysis.

Analyze, diagnose, and troubleshoot GIS database application problems.

Train or instruct GIS users in access to and use of the database system.

Research sources of geographic data; collect, interpret and integrate data from various sources to prepare map manuscripts and reports.

Prepare a variety of reports and maintain accurate records and files.

Work weekends or evenings, as required.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training

A typical way to obtain the required knowledge and abilities would be:

Experience:

No professional experience is required.

AND

Training:

Equivalent to a Bachelor's degree from an accredited college or university in geographic information systems, computer science, information systems, engineering or a related field.

License or Certificate:

Possession of, or ability to obtain, a valid California drivers' license.

Geographic Information System Analyst II

In addition to the qualifications for the Geographic Information System Analyst I:

Knowledge of:

Methods of advanced research, analysis, and management related to GIS system applications and databases.

Ability to:

Independently perform professional level work in GIS management and analysis and related databases.

Prepare written protocols for difficult and complex GIS system and database usage.

Experience and Training

A typical way to obtain the required knowledge and abilities would be:

Experience:

Two years of responsible experience performing duties similar to that of a Geographic Information System Analyst I with the City of Roseville.

AND

Training:

Equivalent to a Bachelor's degree from an accredited college or university in geographic information systems, computer science, information systems, engineering or a related field.

License or Certificate

Possession of, or ability to obtain, a valid California drivers' license.

08-25-12 Geographic Information System (GIS) Analyst I/II
07-01-99 GIS Specialist I/II